

Navigating Change and Transformation in Collection Development

Margaret A. Kleszynski

June 25, 2012

ABSTRACT: For nearly two decades, librarians have been noting and writing about transformational change in collection development and subsequently predicting future directions for libraries in terms of building digital collections. This paradigm shift caused by the incorporation of more and more electronic resources into existing library collections and the profound impact on collection development decisions by this incorporation were predicted by many authors in the library literature. Through a literature review and a survey, transformation of traditional print collection development and acquisitions as they are impacted by academic libraries' movements toward collections in electronic formats were investigated.

KEYWORDS: Library acquisitions, collection development, online resources, e-resources, electronic formats, disruptive acquisitions, staff changes, discontinuous change in library acquisitions, academic libraries technical services, survey, literature review.

RUNNING HEAD: Changes in Collection Development

Navigating Change and Transformation in Collection Development

Margaret A. Kleszynski,

Associate Professor of Library Services

Colorado State University-Pueblo

June 25, 2012

Introduction

For nearly two decades, librarians have been noting and writing about transformational change in collection development and subsequently predicting future directions for libraries in terms of building digital collections. This paradigm shift caused by the incorporation of more and more electronic resources into existing library collections and the profound impact on collection development decisions by this incorporation were predicted by many authors in the library literature.

Literature Review

Changes due to the incorporation of electronic sources into existing library collections and the profound impact on collection development decisions caused by this incorporation were predicted (Sherrer 1996, 126). It was thought that collaboration within and without specific libraries would override personal expertise in collection development, and based on experiences with resources like FirstSearch, library users preferred searching the universe of information as opposed to local collections (Sherrer 1996, 131 - 134). Further, Johannah Sherrer listed “specific actions that should be happening in every library as a result of the electronic revolution:

- Print reference collections should be physically shrinking
- Cancellation of print indexes and abstracts should be routine
- Interlibrary loan traffic should be increasingly accompanied by corresponding increases in staff and budgets for commercial document delivery services

- Every advance in public accessible databases should be accompanied by a corresponding increase in funds for document delivery
- Electronic expansion should be involving networks and collaborative endeavors with other institutions or libraries” (Sherrer 1996, 136).

Later, Sherrer identified “implications of an active and continually expanding resource sharing environment on collections and on collection management practices. Technology is linking library collections de-facto and, as collections are linked, user expectations regarding the ability to retrieve these linked titles becomes a given” she stated (Sherrer 1998, 25). In addition, this author outlined some effects of increased emphasis on resource sharing between libraries, and stated that “the current resource sharing environment is one that is driven primarily by user demand, and the demand for materials not owned is becoming more significant” (Sherrer 1998, 26).

Sherrer noted the movement toward user driven automated borrowing and how new shared catalogs, such as Ohio Link and Orbis, provided for this new type of borrowing and lending between libraries. However, she believed in the continuation and popularity of print collections by library users well into the next millennium. Concurrently, Sherrer noted that site licenses, numbers of simultaneous users as well as copyright issues as impacted by outside users, would be legal factors in collection decisions involving electronic titles (Sherrer 1998, 25-28).

The implementation of the ILL system for all OhioLINK libraries enabled the libraries to function as a unified system, which in turn improved patron services and even further, sent the message to patrons that having that technological unity would ensure success, according to David Kohl. In addition, OhioLINK’s success would not mean the elimination of local libraries’ autonomy, but rather the local libraries would be operating on two levels: on their own and as part of the central network (Kohl 1997, 110-111).

Through OhioLINK, individual libraries do not own a collection in the traditional sense but, rather, are stewards of collections for the consortium. In that regard, OL libraries provide access to local materials on the same basis for consortium patrons as they do for local clienteles, and this cooperation led to changes in collection development for the member libraries. These changes fell under three rubrics: moving from ownership to stewardship; participating on the consortium level in the information revolution; and transforming the role of the local bibliographer. Ultimately, Kohl thought that collection development was still important on the local level within OL in that individual libraries needed to build and maintain a core collections which would be heavily used items on the local level, while lesser used items could be provided through OL, so that each library would not need to be self-sufficient in all areas (Kohl 1997, 113-115). Concurrently, in the consortial environment, “collection mapping” becomes more important than collection building, which leads to a revision of the bibliographers’ roles. Kohl saw a shift from materials being collected in one place to a necessity for librarians to know where to find everything. This created the shift from a focus on purchasing materials to a focus on the needs of faculty, students and library clientele in general (Kohl 1997, 117-118).

Based largely on her experiences at the University of Vermont, Rebecca Martin wrote about challenges and opportunities for academic libraries in a “paradigm of never-ending change”. Included in this transition were:

- An increasing emphasis on networked access to information resources, within the broader context of the emerging virtual library
- An expanding role for library faculty and staff in teaching users how to identify, select, evaluate, and retrieve information resources relevant to their needs
- An enhanced capacity for the library to create, organize, and disseminate select sets of electronic information (e.g., gateways to Internet resources)

- Ongoing development of core collections to support university curricular programs and research needs within the constraints of publication proliferation and price inflation
- A growing responsibility, in alliance with the computing center, to provide a network infrastructure to support academic programs
- A continuing reassessment of services that may be strengthened or diminished according to changing user needs, or streamlined or consolidated to improve organizational productivity
- A flexible faculty and staff, developing new skills throughout their careers” (Martin 1997, 168-170).

At the University of Vermont, the Dana Medical Library redesigned its organizational structures and functions over a period of several years, experimenting with various methods and techniques. It currently represents a melding of three approaches: matrix management, which centers on function-based teams; total quality management (TQM), which emphasizes user satisfaction through continuous reappraisals of services; and the clinical-academic department model, which places library faculty, as relatively independent individuals, in the roles of teaching, research, and service. Each of these approaches is characterized by a reduction in hierarchy with an emphasis on collaboration. Decision making and policy formulation rely heavily on user satisfaction and quality-improvement techniques, with a holistic systems perspective on problem solving. Dana Library faculty serve as subject specialist and liaisons to the one or more departments in the health profession schools and in the medical center (Martin 1997, 171).

Library faculty at Dana have an every-expanding role in teaching users how to identify, select, evaluate, and retrieve resources relevant to their needs and have increasing opportunities to team teach in interdisciplinary programs with faculty in other colleges and schools, particularly in the areas of informatics and information literacy. An important element of this new reference paradigm has been

the decision to place as many electronic resources as feasible directly in the hands of users (Martin 1997, 174).

Coincident with this transition came a reduction in staffing levels within the UV technical services division, as that libraries' principal focus was redirected toward reference services associated with electronic resources and gateway systems. Along with this came outsourcing of cataloging and physical materials processing received through approval plans, at the UV libraries (Martin 1997, 175). This restructuring was not without a certain tension, as Martin refers to "what Peter M. Senge calls 'creative tension', which arises from the gap between vision and current reality. (Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization*, 1990.) Senge uses the metaphor of a rubber band stretched between those two points, with current reality being either pulled toward the vision or held back by the status quo" (Martin 1997, 178).

Joseph Branin noted a shift in libraries from collection development to collection management (moving beyond merely selection and acquisitions) beginning in the 1980's. In the early 1990's, he saw shrinking staff sizes in libraries and new organizational models which were based on downsizing, flattening the hierarchy, more flexible work units, and a team approach to management and supervision (Branin 1998, 7).

Branin predicted new digital information systems which would make physical location of information sources less important, giving way to local access to global collections. He also predicted a breakdown of information boundary issues, client-server architecture, and centralized d-base management in which others manage library's electronic sources. Using hyperlinks to integrate scholarship online is the driving force for the adoption of the new digital information system, a force with which the print format cannot compete, Branin predicted. He believed access would replace ownership of information, but

also stated that he thought print information would remain with us into the foreseeable future. (Branin 1998, 11-15).

James Mouw looked at changes within libraries which were brought about by both incorporation of digital resources and resulting changes in the roles of staff. In addition, he examined how popular consortial purchase agreements were bringing about changes in traditional purchasing and saw the library as publisher. He looked at the new model of aggregated purchasing (now often referred to as package deals) and how it goes hand with hand with the need to obtain license agreements from the publishers. He predicted that bulk purchases of electronic information through consortial agreements would become the preferred model of purchasing because of the advantageous pricing. Coincidentally, Mouw proposed new working relationships with other parts of the parent organization to ensure access to online resources through the institutions' infrastructures, for example, campus networks (Mouw 1998, 15-21).

A year later, Trix Bakker noted that libraries' primary functions of acquisitions, protection and access to information resources remained unchanged, while multi-media, licensing of electronic resources, and the provision of access to these resources were included. She predicted that the shift to a predominantly digital environment would occur at different rates in different fields and thus, different fields should be dealt with individually the addition of electronic resources. Bakker believed, however, that books would remain the most important tools for the humanities community (Bakker 1999,1,6).

Basing his thoughts, in 2004, on a book published by Clayton Christensen in 1997: The *Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*, David Lewis examines Christensen's sustaining versus disruptive technologies. Sustaining technologies improve products or processes, and they can be driven by new, and sometimes even revolutionary, technologies, but what is important is that the improvements result in accomplishing the same thing, only doing it better. Disruptive

technologies initially underperform, according to Christensen, but also improve at a faster rate than established technologies. Established organizations generally fail when change involves disruptive technologies, and organizations at the periphery or from different sectors most often succeed. In examining Buckland's model (Buckland 1992), Lewis notes that there have been two major transitions in libraries in the past fifty years. The first was the change from paper library to automated library. The technologies involved in this transition were sustaining technologies. The second transition, that from the automated library to the electronic library, began in the early 1990's and, as Lewis believes, is likely to run another decade or two. Lewis believed that alternatives exist, or could easily exist, that are cheaper, easier, faster, and more convenient than the comparable services now offered by libraries. For example, in a recent study at Cornell University, Google Answers was found to be significantly cheaper than comparable reference services at Cornell (Lewis 2004, 68-69, 71).

Lewis concludes with four points for libraries to be ready for disruptive technologies:

1. Consider buying half as many books and use money on providing other, non-print information
2. Learn what freshmen want the library to provide to students, even if it conflicts with what faculty think they want
3. Trust small groups within the library to develop products and services, rather than depending on all staff buying in to everything
4. Use money to develop exploratory projects, even though one in three might fail (Lewis 2004, 74).

Stephen Abram and Judy Luther identified nine aspects of behavior specific to Millennials (born between 1982-2002) or NextGens (as renamed by these authors) and differentiated them from previous generations, especially from Boomers (who they said in 2004 dominated the library profession). The authors expressed their expectations and behaviors of this group that will have a

significant impact on the nature of the services that public and academic libraries need to plan and provide. These behavior aspects, as outlined by the authors, included these nine:

1. Format agnostic: NextGens see little difference in credibility or entertainment value between print and media formats, and accustomed to Google-like search engines, this generation will expect to have search results before they are required to select a source. They receive information through sounds (MP3's) and moving images (MPEG and streaming media) more seamlessly and on-demand than any other generation (Abram and Luther 2004, 34).
2. Nomadic: NextGens expect to find information and entertainment being made available to them whenever they need it and wherever they are and must be available 24/7.
3. Multitasking: They have the ability to integrate seamlessly and navigate multiple applications, simultaneously combining their world in a single environment.
4. Experiential: NextGens prefer content-rich web pages as opposed to tables-of-contents navigation for exploring content sets and domains. Their world is “asynchronous, asymmetrical, and engaging.” In other words, more of their learning behaviors are supported by nontext interfaces than by text-based interfaces (Abram and Luther 2004, 36).
5. Collaborative: Virtual reference should allow librarians to communicate with NextGens in a way that more closely matches how they use technology and interact with others for research. NextGens collaborate as a core ethos—e.g. in multiplayer web games, virtual classrooms, and chat rooms (Abram and Luther 2004, 36).
6. Integrated: “Content and technology are inseparable for NextGens. Communication technology has blurred the distinctions between private and public domains and learning environments and entertainment. Librarians need to be integrated with the virtual environment as coach, mentor, and information advisors.”

7. Principled: Abram and Luther also proposed that NextGens have a well-defined value system, and express themselves by voting with their actions across the political spectrum. Veganism, vegetarianism, political action, environmentalism, and voluntarism are modes of behavior common to NextGens.
8. Adaptive: "It is fair, and arguably the law, that this generation's libraries provide the tools for them to access learning effectively. In contrast to any previous generation, this one has been tested and diagnosed for physical and learning challenges."
9. Direct: In general, NextGens are direct communicators, neither rude nor obsequious, just direct. On the positive side, they will ask for help. On the negative side, they will express dissatisfaction with services that do not meet expectations. This next generation will challenge libraries in ways undreamt of today, likely in ways greater than the challenge of the Internet" (Abram and Luther 2004, 37).

In his 2004 article, Daniel Dorner presented the results of research done with, first focus groups, and then via a survey sent by email to research libraries in five major English-speaking countries. His goal was to determine the impact of digital information resources on the roles of collection managers and to measure the extent to which libraries were transitioning as a result of the influx and challenges of digital information. Dorner sought to better define the role of collection managers within information services and a practice-based appreciation of the changes resulting from the arrival of digital information resources.

His survey results reflected the arrival of digital information and the blurring of boundaries between the various players in the information chain which were, in 2004, affecting the roles of the collection managers in libraries and information services. The survey consisted of 79 questions grouped into these areas: (1)demographic (2) management (3) administration (4) selecting and evaluating (5)

preservation and archiving (6) intellectual access (7) physical access and technology issues (8) education and training, and (9) general (Dorner 2004, 249-252).

General demographics: Dorner first wanted to determine the location, type, and size of the institutions in which the respondents worked and their levels of responsibility and experienceIn total, 151 valid responses were received, and libraries were classified into 6 sizes: very small (1-9 staff), small (10-24 staff), medium small (25-49), medium (50-99), large (100-199), and very large (200+). The largest number of respondents were in very small libraries.

Management aspects: a question was asked about experience in collection management to determine levels of responsibility for decision making within their institutions (i. e . length of time in a collection management position).

Results were that nearly 70% reported that their level of responsibility for collection management related to digital resources had increased either moderately or greatly compared to 5 years ago, and overall, that digital information is increasingly affecting the responsibilities of collection managers in research libraries. For nondigital resources, the amount of funds controlled has either gone down or stayed the same. For providing access to digital resources through licensing agreements, 75.2% said that it had increased (Dorner 2004, 255-256).

Dorner concluded that the biggest changes in libraries are with respect to responsibilities for the collection management of digital resources. The majority of respondents reported that the amount of time they spent related to the collection management of nondigital resources has either stayed the same or gone down during the past 5 years. Concurrently, the vast majority of respondents (116 of 151) reported the amount of time they spent on collection management related to digital resources increased compared to 5 years ago. These data confirm that research librarians are increasingly spending time on collection management work related to digital libraries. Additionally, for the majority

of respondents the amount of time spent on IP (Intellectual Property)issues has increased compared to 5 years ago (Dorner, 2004, p. 257,258).

Administration: (i.e. areas of collection management related to staffing and various types of liaison work.) Results of the survey showed greater importance for activities related to digital resources than for activities related to nondigital resources (Dorner 2004, 261).

Evaluating and selecting: The majority reported an increase in time spent for evaluating and selecting commercially supplied digital resources and freely available digital resources. Coincidentally, collection managers were spending more time weeding than previously, and that the increases were about the same between paper and digital resources

Survey results provided support that collection management budgets are indeed being focused more and more on digital resources at the expense of paper-based resources, possibly because of a shift from paper journals to aggregations of electronic journals (Dorner 2004, 262-263).

Preservation and archiving: The findings in this section suggested that preservation and archiving activities related to digital resources were not part of most collection managers' roles; however, when they are part of their roles, the amount of time being spent on the related activities had been about the same or increased only slightly (Dorner 2004, 264.)

Intellectual access to resources: the amount of time spent on intellectual access to resources increased for those collection managers involved in related activities. This increase was the greatest for those involved in creating or maintaining Web pages for their libraries' portals or locator systems (Dorner 2004, 266).

Physical access and technology issues: The data showed that for most collection managers there were relatively small increases in the amount of time they spent on activities related to hardware and software relative to digital resources and to liaising with computing staff about access issues.

Education and training: Survey data clearly demonstrate the growing importance of, and time being spent by collection managers on education and training activities related to digital information resources (Dorner 2004, 267).

In general, survey results indicated that librarians in 2004, were thinking differently about developing collections. The majority did not agree that senior administrators were making collection management decisions because of the size and complexity of commercial transactions related to digital resources and some collection management decisions had been taken out of the hands of the collection managers because of the expense. However, when senior administrators rather than librarians were involved in making decisions about large deals and licensing of digital information resources, their decisions were usually made with reference to their libraries' collection development policies (Dorner 2004, 268).

Dorner reported that libraries were becoming more proactive in promoting digital resources while concurrently realized they must encourage and achieve high use of digital resources in order to justify the cost. In addition, 95.6% of respondents agreed that consortia had become more important to research libraries since the advent of digital information resources (Dorner 2004, 269-270).

Dorner concluded that the past 5 years, the levels of responsibility and the time spent on activites related to digital resources had increased for most collection managers. At the same time, the levels of responsibility and the time spent on aspects of nondigital resources had also risen, but not as dramatically as for digital resources, and not all collection managers perform the same roles or undertake the same activities in their roles. In addition, the roles of collection managers varied depending on factors such as the type and size of library, the percentage of the collection provided in

digital form, and so on. Dorner believed that the roles will continue to evolve over time. Furthermore, changes in thinking had resulted in collection managers implementing or thinking about implementing different staffing structures to deal with the issues that have arisen. The data collected in the survey confirmed that in many libraries, the boundaries that have delineated the roles of collection managers were blurring (Dorner 2004, 271-272).

Since 2008, the digital revolution in academic libraries has placed libraries in “discontinuous change”. Synonymous with this phrase are: “discontinuous progression”, “disruptive innovation”, and “discontinuous switch”, all phrases used to describe the paradigm shift libraries are facing in collection development . These concepts and phraseology with regard to libraries are central to Ross and Sennyey’s belief that the digital revolution has “changed the nature of information”, and as a result, “libraries now face competition as information providers” as students and scholars increasingly bypass the library to satisfy their information needs. This paradigm shift amount to changes that are disruptive, as they challenge the traditional role, purpose, and operations of the library (Ross and Sennyey 2008, 145).

Ross and Synnyey propose that libraries continue to underestimate the significant collections being built online. When looking at the paradigm, they see emerging technologies (i.e the digital environment) increasing while traditional protocols and services are shrinking in importance. Furthermore the Internet has lowered the cost of propagating information to negligible levels which diminishes the value of local collections and services, and the competitive market environment is the most significant change libraries face today. Since “competition is not a one-time phenomenon, but rather a present and future reality, librarians must now confront disruptive innovation as a matter of routine (Ross and Sennyey 2008, 145, 147).

In a digital environment the locus of value shifts away from areas central to the traditional identity of academic libraries, including services, the collection, and the library as place. For a variety of reasons the OPAC has failed to evolve, and for today's users, weaned on Yahoo and Google, the OPAC seems oddly out of place although it could continue to exist for as long as the scholarly monograph remains its analog format. Google Scholar does something that no library system can match in that it allows us to seamlessly search a wide variety of information . When students are required to perform research, they are able to bypass the library as the Web now offers many competing sources of information. Digital collections are not tied to geographic boundaries, and location, organization, and management are irrelevant in the new medium. Coincidentally, government documents collections are already shrinking in size and may cease to exist altogether (Ross and Synnyey 2008, 148-150).

Advances in technology yield “discontinuous progression”, in that as individual companies shift from success in exploiting a new technology to stasis, and then loss as new, and better technologies are exploited by the competition. Once established entities recognize the competitive threat in which they operate, their reflex is to fine-tune the time-proven model—obsolete though it may be—rather than recognizing that the marketplace has made a discontinuous switch to an altogether new model (Ross and Synnyey 2008, 150-151).

In 2009, Robert Flatley and Krista Prock examined the process they and other academic libraries used to select electronic resources. They questioned how librarians make decisions on what to purchase and what to cancel in e-collections. They admitted that they frequently feel overwhelmed trying to stay on top of all the offers and make the best decisions in e-resources. In examining the literature, they found very little information about selection processes and criteria in use by libraries for buying online databases.

These authors a five step process for collecting electronic, or digital, material that includes gathering, evaluating, organizing, construction of digital collections, and maintenance of digital collections. They found that the type of information absent from the literature is a study of current library practice in this area and librarian input about whether the current process (or lack of processes) is an effective way to select electronic resources. They subsequently developed a survey in order to determine how libraries evaluate electronic resources to purchase and cancel?

They contacted 72 librarians via email and gave librarians the option to fill out the survey electronically. They had a total of 18 responses (a 25 % response rate.) The results of their survey indicated that most libraries use more informal processes for selecting e-resources. Of the 18 libraries that completed the survey, 10 had no particular process for evaluating resources before purchase, 6 had an informal process and 2 had a definite process. They found a wide range of answers were given for who selected these resources—from a committee of all librarians to one individual. Furthermore, the survey revealed that two libraries used an Electronic Resources Committee, and that overall, teaching faculty played a more minor role in the selection process. However, teaching faculty were, in general, consulted for input before cancellation of a resource. Similar criteria for canceling resources were reported among most institutions and included usage statistics, budget, duplication and dissatisfaction with a resource. It was mentioned that consortia played a major role in the selection process for the majority of respondents (Flatley and Prock 2009, 2-3).

As a result of their survey findings, the authors suggest best practices in managing e-collections: be proactive in making e-collection decisions, develop an E-collections Collection Development Policy, get input from all stakeholders, and develop criteria (Flatley and Prock 2009, 4-5).

Tony Horava explores collection management as it relates to core values, scholarly communication issues, acquisitions activities, access and delivery issues, and innovation. He offers reflections for

charting the future of collection management. He notes new forms of information-seeking behavior and learning styles, and the explosion of online resources for obtaining, using, and sharing knowledge and research. He states that libraries need to embrace the new, including all kinds of new media, or risk losing relevance. They also need to recognize the importance of digital materials needed for education and scholarship (Horava 2010, 142-143).

According to Horava, a library collection has expanded over the last 125 years to comprise at least four levels: locally owned physical documents; physical documents owned by other libraries but available through ILL; purchased or subscribed to electronic documents, and free electronic documents. He believes that disintermediation has become a hallmark of autonomous behavior in communication and information-seeking behavior and individuals follow their own course of inquiry without needing any guidance from information professionals such as librarians. Media mash-ups and format and time shifting are omnipresent and challenge collection practices developed in a print era. In this digital culture resources are available 24/7 and are integrated into the information-seeking behavior of students and the workflow of faculty. If an item is not available online, it has less and less importance to many of our patrons. The treasures of our book collection will not be unlocked by the next generation unless these books are available online (Horava 2010, 147).

Now that libraries are now spending a large portion of their acquisitions budget on electronic resources, workflows that typically were geared toward print purchasing and processing are being affected. Consortial acquisitions offer substantial budget benefits but greatly diminished local autonomy over content selection decisions and pricing. Sustainable practices for acquisitions will leverage new technologies, streamline workflows for material selection and acquisition, and optimize collaboration with vendors and publishers. License negotiations have become a critical aspect of acquisitions activity during the past decade and a new skill set has become essential for acquisition and collection librarians

involved in these activities . In addition, librarians need to take a leadership role in copyright education and in scholarly communication issues in academic libraries (Horava 2010,146-147).

Librarians are challenged to creatively reinvent themselves in light of these rapid developments in scholarly communication, acquisitions activities, access and delivery issues, and innovation and this creates the transformation and paradigm shift in the future of libraries.

As a result, Horava presents his ten-point approach to redefine collection management in the networked era:

1. Focus on what is sustainable: Sustainability involves an understanding of how we can marry best practices to strategic goals to achieve high impact for our diverse patron community.
2. Consider what a collection does rather than what a collection is. How effective is the collection in meeting the diverse information-seeking behaviors and workflows of these groups?
3. As our parent institutions are changing, so must we. The need to become more agile in shifting approaches in response to new institutional directions is becoming more important for remaining relevant and effective.
4. We must make strategic decisions about what formats we support in the multi-format universe.
5. Changing current practices will add value for our patrons. Disruption can be an opportunity for innovation and refocusing our efforts.
6. We must seek the right balance between competition and collaboration.
7. We must seek creative partnerships with publishers and vendors.
8. We need to measure collection value in new ways.
9. We need to exploit our new understanding of the collection to the best of our ability. The collection is everywhere and nowhere—it is a cloud of distributed resources in a variety of places around the globe that are made centrally available via the library. A new paradigm

10. Collection librarians must expand their skills and expertise (Horava 2010, 149-151).

Goals of the Survey

Through first a literature review (done in summer and early fall) (appended to this report) and second, a survey emailed to contacts within our peer institutions, I examined the transformation of traditional print collection development and acquisitions as they are impacted by academic libraries' movements toward collections in electronic formats within the past decade. I was particularly interested in investigating the concept of "disruptive acquisitions" as described in the literature (this print to electronic shift). In other words, what is the significance of "discontinuous change" in libraries brought about by this "disruptive acquisitions" if any? And are libraries universally impacted by this phenomenon?

Survey Methodology

The survey was composed of questions designed to elicit information about possible changes or transformations in collection development and/or in the roles of collection managers in libraries such as ours. In addition, I wanted to see if survey data would reveal whether or not there is increased collaboration between collection management and other areas of the library and/or parent institutions as a result of the digital revolution. The survey was sent to a pre-selected contact group of 48 librarians in both our old and new peer institutions using Survey Monkey and was active September 17 – 30, 2011. I mailed (since I did not have specific names of the collection development/acquisitions librarians) the survey to a select group of 16 Colorado public libraries of varying sizes as well. While the response rate of the public libraries was too low to be truly valid, comments in the last section asking respondents to list their concerns regarding the future of collection management, yielded very interesting and valuable insights.

Survey Results

The response rate for our academic peers was 33%, but I believe the information gleaned from them is both valuable and interesting. 73.3% of the academic responders were the head supervisor of collection management, were staff supervisors of at least 1 person, in their libraries and held faculty status with 3

times more Assistant Professors than Associate or Full Professors. 60% of responders said the number of staff managing print resources in the past 5 years has remain unchanged, while 40% reported a decrease in the number of staff. 66% reported that their library had created new staff positions to handle electronic resources in the past 5 years, while 33% said no new staff positions had been created for this purpose. 93.3% of responders said they did not approve and sign licenses for electronic resources, while only 6.7% answered yes; they did approve and sign licenses. 71.3% of responders strongly agreed, agreed, or somewhat agreed that staffing changes in collection management have been driven by the increase in purchasing and licensing of electronic resources. 85.7% either strongly agreed, agreed, or somewhat agreed that increased purchasing of electronic resources in their library has caused increased collaboration between collection management and other departments. 64% of responders strongly agreed, agreed, or somewhat agreed that campus faculty in various subject areas have the greatest influence over decisions to purchase new electronic resources in their library while 78.4% agreed that subject librarians have the greatest influence over decisions to purchase new electronic resources. Interestingly, 100% of responders agreed that resource sharing agreements such as consortial or system agreements have impacted decisions to acquire new electronic resources within their library.

Conclusions

Based on a literature review in this area and based on survey results as well as on my own experience as a collection manager, the most important things to take away from this study include a realization that electronic resource acquisition requires new skills and new mindsets of librarians and library staff. These new skills include the ability to manage and provide access to new electronic resources while concurrently balancing budgets as well as continuing to provide still needed print resources, and any other creative endeavors that will help provide services and programming to meet library needs of now and future students, faculty and other library clientele. Strategic planning for library services in the future and sustainability of those services and resources is essential. New technologies require us to focus on sustainable tools to support information-seeking behavior of researchers, interactivity, and immediacy of access.

In conclusion, should our Information Management department at CSU-Pueblo look at changing staff job descriptions to align with a procurement/process model, or should we continue to base job descriptions on managing formats? Looking again at the survey results, 6 Librarians of the 14 total respondents, or 43% of respondents handle both print and E-resources, while 8 of the 14 or 57% of respondents manage some formats but not both print and E-resources. We can conclude, then, that for a majority of respondents, staffing is changing to handle different formats. CSU-Pueblo therefore could change its staffing to align with what other libraries are currently doing.

Works Cited

- Abram, Stephen and Judy Luther. 2004. "Born with the chip." *Library Journal*, May 1, 2004. 34-37.
- Bakker, Trix. 1999. *Resource sharing in a virtual library environment: user oriented collection Management*. Retrieved from <http://www.sociosite.net/bakker/resovirt.html>
- Branin, Joseph J. 1998. "Shifting boundaries: managing research library collections at the beginning of the twenty-first century." *Collection Management*, 23 (4): 1-17.
- Christensen, Clayton M. 2000. *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston, Mass: Harvard Business School Press.
- Dorner, Daniel G. 2004. "The impact of digital information resources on the roles of collection managers in research libraries." *Library Collections, Acquisitions, & Technical Services*, 28: 249-274.
- Flatley, Robert and Krista Prock. 2009. "E-Resource collection development: a survey of current practices in academic libraries." *Library Philosophy and Practice* (e-journal), <http://digitalcommons.unl.edu/libphilprac/296>
- Horava, Tony. 2010. "Challenges and possibilities for collection management in a digital age." *LRTS: Library Resources and Technical Services*, 54 (3): 142-152.
- Kohl, David F. 1997. "Farewell to All That...Transforming Collection Development to Fit the Virtual Library Context: The OhioLINK Experience." In *Restructuring Academic Libraries: Organizational Development in the Wake of Technological Change*, edited by Charles A. Schwartz, 108-120. Chicago: Association of College and Research Libraries.
- Lewis, David W. 2004. "The innovator's dilemma. Disruptive change and academic libraries." *Library Administration & Management*, 18 (2): 68-74.
- Martin, Rebecca R. 1997. "Restructuring the University of Vermont Libraries: Challenges, Opportunities and Change." In *Restructuring Academic Libraries: Organizational Development in the Wake of*

Technological Change, edited by Charles A. Schwartz, 168-179. Chicago: Association Of College and Research Libraries.

Mouw, James 1998. "Changing roles in the electronic age—the library perspective." *Library Acquisitions: Practice & Theory*, 22 (1): 15-21.

Ross, Lyman and Pongracz Sennyey. 2008. "The library is dead, long live the library! The practice of Academic librarianship and the digital revolution." *The Journal of Academic Librarianship*, 34 (2): 145-152.

Senge, Peter M. 1990. *The Fifth Dimension: The Art and Practice of the Learning Organization*. New York: Doubleday.

Sherrer, Johannah. 1996. "Collection development in the revolutionized environment." In *The National Electronic Library: a guide to the future for library managers*, 125-137. Westport, Conn: Greenwood Press.

Sherrer, Johannah. 1998. "Resource sharing, collection development and technology." *Technical Services Quarterly*. 16 (2): 25-33.